

ENGINEERS
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MORRISON KNUDSEN CORPORATION

MK - FERGUSON GROUP

WELDON SPRING SITE REMEDIAL ACTION PROJECT
7295 HIGHWAY 94 SOUTH
ST. CHARLES, MISSOURI U.S.A. 63304
PHONE: (636) 441-8086

86738 - 23



APRIL 07 2000

U. S. Department of Energy
Weldon Spring Site
Remedial Action Project
ATTN: Mr. Stephen H. McCracken
Project Manager
7295 Highway 94 South
St. Charles, MO 63304

SUBJECT: Contract No. DE-AC05-86OR21548
TRANSMITTAL OF THE POST REMEDIAL ACTION REPORT
FOR VICINITY PROPERTY MDC-6

Dear Mr. McCracken:

Attached is a copy of the Post Remedial Action Report for Vicinity Property MDC-6 entitled *Confirmation Results for Vicinity Property MDC-6 (RU12/CU141)* dated May 6, 1999. This report was written in an IOC format due to the extremely small area comprising Remedial Unit 12, which required only two samples. Please forward copies of this IOC to ORISE, ANL, the EPA, and the MDNR.

If you have any questions or need further information, please call Melissa Lutz at extension 3544.

Sincerely,

Douglas E. Steffen
Project Director

DES/ml/lac

Enclosure: as stated

cc: Pamela Thompson



MORRISON KNUDSEN CORPORATION

MK-FERGUSON GROUP

INTER-OFFICE CORRESPONDENCE

86738 - 112

DATE: May 6, 1999
TO: Distribution
FROM: Melissa Lutz *ML*
SUBJECT: CONFIRMATION RESULTS FOR VICINITY PROPERTY MDC-6 (RU12/CU141)

Confirmation soil samples were collected from Vicinity Property MDC-6 in accordance with the *Confirmation Sampling Plan Details for Vicinity Property MDC No. 6 (DOE/OR/21548-631)*. A summary of the results and associated field activities is presented below. There were no deviations from the sampling plan. Additional information about MDC-6, including characterization results, can be found in the *Close Out Report for Vicinity Properties MDC6 and MDC9 (DOE/OR/21548-775)*.

Vicinity Property MDC-6 was designated as Remedial Unit (RU) 12 and Confirmation Unit (CU) 141. During removal of Quarry bulk waste, MDC-6 was remediated. The initial walkover surveys for this vicinity property were conducted immediately after excavation, but no documentation could be found. Therefore, the gravel was removed in June 1996 and another walkover was conducted. The NaI detector (2x2) background reading was 3,500 CPM and was taken at the Weldon Spring Quarry telephone pole along Highway 94. The readings ranged between 3 to 6 K, with the majority being 3-4K. Walkover results were documented on the Radiation Survey Form.

Once the walkover was completed, the confirmation soil sampling locations were staked by the surveyors according to the sampling plan. Confirmation soil samples were collected at the 2 designated locations as designated in the sampling plan (Doc 631). Final results are summarized in Table 1.

Table 1 Summary of Confirmation Results for RU12 (CU141)

Parameter	Range (pCi/g)	Average (pCi/g)	ALARA GOAL	CLEANUP CRITERIA
Radium-226	1.11 - 1.29	1.2	5.0	6.2
Radium-228	0.43 - 1.05	0.74	5.0	6.2
Total Radium	1.72 - 2.16	1.94	5.0	6.2
Thorium-230	1.10 - 1.76	1.43	5.0	6.2
Uranium-238	All results ND	NA	30	120

ND Non detect

NA Not applicable


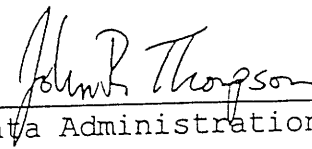
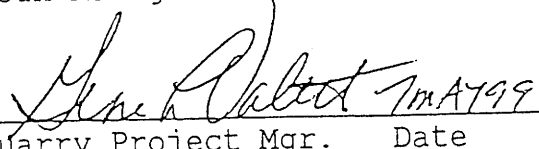
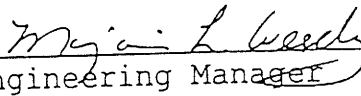
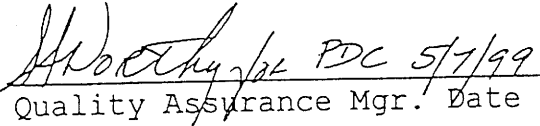
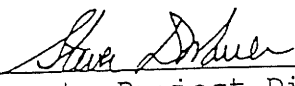
PAGE 2: CONFIRMATION RESULTS FOR VICINITY PROPERTY MDC-6
(RU12/CU141)

These results met the cleanup standards as detailed in the Chemical Plant Area Cleanup Attainment Confirmation Plan (DOE/OR/21548-491). This CU was released as unrestricted on July 08, 1996. A copy of the disposition form, which includes results and a figure, has been attached.

Quality control samples for confirmation were collected in accordance with the Attainment Plan. Although there were no QC samples specifically associated with SC-14101-C and SC-14102-C, QC samples were collected during that week for overall confirmation sampling activities as detailed in the WP-420 Post Remedial Action Reports (DOE/OR/21548-666). QC results collected during this period met the DQRs.

ML/jn

Attachments: as stated

	5/7/99		5/7/99
ES&H Manager	Date	Data Administration Mgr.	Date
	MAY 99		5-11-99
Quarry Project Mgr.	Date	Engineering Manager	Date
	PDC 5/7/99		5/11/99
Quality Assurance Mgr.	Date	Deputy Project Director	Date

Distribution:

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86738 213

ES&H 1.2.1.1, Rev. 1, 03/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

Page 1 of 2

SECTION I

1. Work Package Number: — 2. Date: 7-2-96 3. Review Form #: 96-023
4. Remediation Unit Number: R4012 5. Confirmation Unit Number: CW141 (map attached)
6. Contaminants of Concern: X U-238 X Th-230 X Th-232 X Ra-226 X Ra-228
— TNT — PCB — PAH — As — Cr — Pb — Tl

7. Results average below ALARA goal(s)?

X Yes — No

8. All results below cleanup criteria?

X Yes — No

9. Any results greater than 3X criteria?

— Yes X No

10. Hotspots present (less than 3X criteria)?

— Yes X No

Parameter	Size	Concentration	Complies with Plan?
N/A			<u>—</u> Yes <u>—</u> No
			<u>—</u> Yes <u>—</u> No
			<u>—</u> Yes <u>—</u> No
			<u>—</u> Yes <u>—</u> No
			<u>—</u> Yes <u>—</u> No

11. Reviewer: Mel H. Lutz Date: 7/2/96

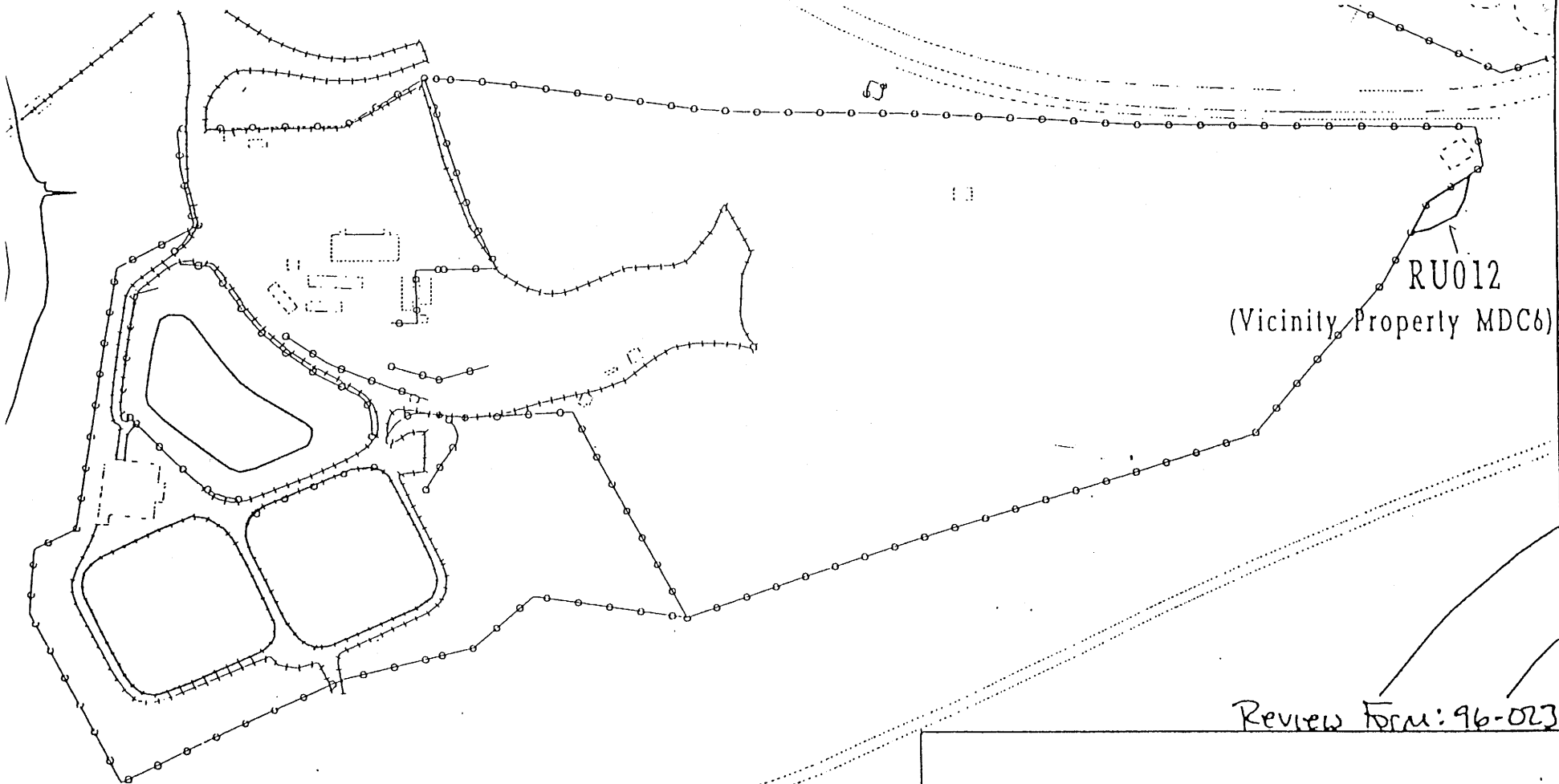
12. Reviewer Disposition Recommendation: X Release for Unrestricted Use (Section II)
— Additional Excavation Required (Section IV)
— ALARA Committee Required (Section III)

SECTION II

Results are ALARA. CU is released for unrestricted use.

14. ES&H Manager: [Signature] Date: 7/2/96
15. DOE Project Manager/Engineer: Thomas C. Pauling Date: 7/2/96
16. Project Manager: [Signature] Date: 7-2-96
17. Construction Engineer: [Signature] Date: 7-8-96

SEE ATTACHED RESULTS AND MAP



Location of Remedial Unit RU012

Figure 1-1

EXHIBIT NO.: A/QY/026/0596	REPORT NO.: DOE/OR/21548-631
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS DATE: 05/96

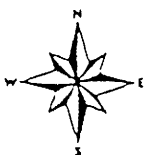
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SC-14102-C

SC-14101-C

10 5 0 METERS

30 15 0 FEET



Review Form: 96-023

Sample Locations in Remedial Unit RU012
Confirmation Unit CU141

Figure 2-1

Confirmation Results for RU012CU141

Location ID	Parameter	Concen	Units	Lab Request
SC-14101-C	Uranium-238	<3.21	pCi/g	WP093
	Radium-226	1.77	pCi/g	WP093
	Radium-228	0.64	pCi/g	WP093
	Thorium-230	1.10	pCi/g	QT1406
	Thorium-232	0.66	pCi/g	WP093
SC-14102-C	Uranium-238	<2.85	pCi/g	WP093
	Radium-226	1.91	pCi/g	WP093
	Radium-228	1.01	pCi/g	WP093
	Thorium-230	1.76	pCi/g	QT1406
	Thorium-232	1.04	pCi/g	WP093

WELDON SPRING SITE REMEDIAL ACTION PROJECT
MK-FERGUSON CO., INC. WO 3589 (314) 441-8086

Document Number:

86738

7295 Highway 94 South
St. Charles, MO 63304

Document Type: LR-MKFW-DOEW

Originators DCN:

SUBJECT TRANSMITTAL OF THE POST REMEDIAL ACTION REPORT FOR VICINITY PROPERTY MDC-6

AUTHOR STEFFEN, DOUGLAS E.

TO MCCracken, STEPHEN H.

DATE

4/7/00

SUBJECT CODE/WORK PACKAGE NUMBER

0-3010

REFERENCED DOCUMENT(S)

ACTION ITEM TRACKING

INITIATE ACTION ITEM

INDIVIDUAL ASSIGNED TO ACTION

DEPARTMENT

ACTION REQUIRED

DUE DATE //

ACTION ITEM LOG NUMBER

CLOSE ACTION ITEM

ACTION ITEM LOG NUMBER

INITIATING DOCUMENT DIN

COMPLETION DATE

APPROVAL

COMMENTS

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S.D. ANDERSON			WORK PACKAGE FILE					
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